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JAPAN - UNITED STATES
~~RADIOBIOLOGICAL CONFERENCE~~

~~Japan Science Council, Ueno, Tokyo~~
Thursday, November 18, 1954

~~FOR IMMEDIATE RELEASE~~

Reports on Japanese researches in diverse fields of radiobiology were received by the international conference at this afternoon's session, and the morning was devoted to discussions of methods of decontaminating foods, water, laboratory workers and laboratory instruments which have been contaminated with radioactivity substances.

Chairman for the morning session was Dr. Fumio Yamasaki of the Japanese delegation; for the afternoon, Mr. Merrill Eisenbud of the United States delegation.

Mr. Eisenbud opened the morning session with a report of findings from researches in methods of decontaminating water supplies for human consumption. He called attention particularly to extensive studies by Harvard University in the water supply reservoirs of Boston and Cambridge, Massachusetts, and Rochester, New York, and by Rensselaer Polytechnic Institute in the water supply of Troy, New York. In this case, the studies on the quantities of radioactive substances falling out and the amount of the same substances contained in the water were found to show that, because the natural forces, time and biological processes, quickly decontaminate the water reservoirs, the amount of radioactive substance in the water supply was far below any level of hazard to human health.

For even more rapid artificial decontamination the Atomic Energy Commission has studied various treatments. In experiments at Los Alamos, New Mexico, one process removed 95 percent of the radioactivity introduced into the water supply; at Boston 50 percent was removed by another.

This was followed by an explanation of Japanese experiments, in which it was reported that if it is necessary to decontaminate drinking water in the home, considerable decontamination can be attained by using charcoal and sand as a filter. Dr. Tajima reported that, by using this method in the laboratory, 90 percent of the radioactive substances in the water was found to be removed.

Close attention was given to American and Japanese methods of keeping radioactivity away from the surfaces and equipment in radioactive laboratories. Dr. Harley said that absolute cleanliness is necessary in order to make sure that the samples are correctly measured. Step by step he described the procedures used in American laboratories and gave the names of detergent substances employed in washing solutions. He continually emphasized that accurate measurement was possible only when all traces of radioactivity from previous work were removed from the laboratory and its equipment daily.

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Dr. Miyake raised questions about whether in lieu of the laborious cleansing methods used in American laboratories it would be possible to use a plastic film on equipment and throw it away whenever it was contaminated. Dr. Sterling Hendricks of the American delegation recounted efforts to do this, using silicones, but said they had not been satisfactory. Dr. Harley stated that equipment made of polyethylene, such as beakers, and flasks, were satisfactory if heat is not applied to them.

From water supplies and laboratories the discussion then moved to decontamination of human beings who receive a dusting or a dousing with radioactive materials. Dr. Walter Claus of the American Delegation outlined the methods of decontaminating human skin. His formula was brief and simple -- wash with copious quantities of soap and water, using a mild abrasive if necessary to loosen a sticky contamination. The abrasive used in America is corn meal -- a substance which puzzled the Japanese conferees somewhat. Later in the day a sample of corn meal was shown to indicate the kind of substance it is. During this discussion the question was raised as to whether the methods used for decontaminating human skins could be used for decontaminating vegetables. Dr. Claus answered that the same principles applied -- wash with copious quantities of water. In addition, of course, he noted, many vegetables are peeled or outer leaves can be removed and the contamination thus taken away.

The question of getting out of the animal and human body radioactivity that has been taken in with food or water brought a lively consideration of instances in which ethylenediamine - tetraacetic acid salts of calcium or sodium took strontium and plutonium from animal bone structure. The conclusion reached in a colloquy between United States delegate Eisenbud and Japanese delegate Dr. Masanori Nakaidzumi was that to be effective in carrying out of the body through excretion plutonium or strontium, EDTA (the common chemical name for this substance) must be administered very soon after the plutonium or strontium are swallowed; otherwise these elements will become fixed in bone and the EDTA will not take them out.

The afternoon session started at 1 P.M. with Mr. Eisenbud presiding. In the first place, Dr. Hiyama made a brief explanation about the result of investigations of the Shunkotsu-maru. He introduced his own theory regarding the contamination of the sea and its fauna and flora based upon the overall researches made of the tuna fish landed and the investigation carried by the United States delegation.

Using printed matters and chart, Dr. Nagasawa supplemented Dr. Hiyama on the radioactive measurement of the tuna fish which was abandoned.

Dr. Boss made supplementary explanations and observations.

Dr. Miyake then made a general observation, using charts, on the result of measuring the radioactive rainfall which fell in various cities and towns in Japan this spring. Interesting questions and discussions took place on the rainfall by Dr. Shimizu, Mr. Eisenbud, Dr. Nakaidzumi and Dr. Nakamura.

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